

Formative Research on Eat Smart, Live Strong: A Nutrition and Physical Activity Intervention for Older Adults

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Main Points

- Describe how the AED BEHAVE framework can be used to select and design interventions
- Present results of a *Promising Practice Review* to develop an intervention to improve eating and physical activity among older adults



Our Charge



- To develop an intervention
- To promote healthful eating and increased physical activity
- To develop for the pre-defined target audience: low-income older adults (ages 60 to 74)

Steps

- Formative Research
 - Literature review
 - Promising practices review
 - Input from stakeholders
 - Recommendations for intervention

BEHAVE Framework



The **BEHAVE** Framework can be used...

- To capture the four major decisions of intervention selection and design
- To organize and summarize formative research results
- To facilitate discussion and consensus among diverse stakeholders
- To tease out and communicate intervention logic

BEHAVE Framework

Who	What	Why	How
Priority Group	Behavior/ Action	Key Factors/ Determinants	Activities
Who is being addressed?	What we want the priority group to do?	What factors are causes of this behavior in this group?	What activities can improve the factors and thus facilitate the behavior?

Example BEHAVE Framework: Wheeling Walks

Priority Group	Action	Key Factors	Activities
Sedentary 50 to 65 year olds	Walk 30 minutes on most days (10 min at a time is okay)	* Lack of time * Place to walk	* Ad - you have the time * Work on trails

YOU TRY!!!!

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Promising Practices Review

- One source of formative research findings
- Increasingly used to develop national interventions and programs
- Challenge ----- how to guide and organize findings?

What is a Promising Practice?

- An individual program component or activity?
- An integrated program with many components?
- A general principle based on many intervention studies?

Definition of Promising Practice

An integrated, multi-faceted program or intervention that is made up of several component activities and materials and that has been demonstrated to be effective at improving behavior and/or the determinants of behaviors

Because this is what the literature looked like.

Steps in Process

- Identify articles published between 1996 and 2002 through key word search
- Scan to identify articles with effective interventions
- Describe these *Promising Practices* using template based on BEHAVE
- Rate interventions on 12 criteria
- Synthesis findings using BEHAVE

Scan to identify articles with intervention studies

- Selected 82 published articles potentially about interventions or programs based on title
- Reviewed to meet three standards
 - Addressed low-income and older adults
 - Targeted eating fruits and vegetables, walking or some physical activity
 - Demonstrated an impact on behavior
- Identified 18 studies of interventions with evidence of effectiveness



Describe the Promising Practices using template

- 18 documents with interventions were read by associates trained in BEHAVE
- Described using template based on BEHAVE
- Wrote 2-3 page summary
 - Intervention
 - Study population
 - Effectiveness

Template

- **Name and goal**
- **Intervention with BEHAVE**
 - Priority Group
 - Behaviors
 - Key factors
 - Activities
- **Study**
 - Study population
 - Recruitment
 - Setting/context
- **Evaluation**
 - Method
 - Effects on key factors
 - Effects on behavior
 - Effects on health status

12 Criteria

- **Priority Group**
 - Addresses older and/or low-income
 - Addresses cultural needs of population
 - Promotes active participation
- **Behavior**
 - Attempts to change behavior of interest
 - Demonstrates impact on behavior
 - Rigor of evaluation design
- **Key factors/determinants**
 - Addresses key factor/determinant
 - Demonstrates impact
 - Rigor of evaluation design
- **Other criteria**
 - Evidence of participant satisfaction
 - Feasibility/resources needed
 - Addresses structural factors

Rate Promising Practice on 12 Criteria

- Read by two independent raters
 - One representing program community
 - One research and evaluation officer
- Assigned points on 12 criteria in four main groups with 3 levels on each criteria
 - 0 if no comparison group
 - 3 if comparison group
 - 5 if random assignment to create comparison group
- Summed to create overall rating

Synthesize Findings

- **Priority Group**

- Older adult and/or low-income
- Ethnicity
- Locality

- **Behavior**

- Fruits and vegetables
- Walking or physical activity
- Both

- **Effectiveness**

- On determinant
- On behavior
- On health status

- **Activities Used**

- **Ranking and Score**

Sources of Data

- Published evaluations of interventions
 - Just described
- Unpublished descriptions from interviews with program managers
 - Evaluation data not available
- Published review articles
 - Summarized principles

Formative Research Findings Using BEHAVE



BEHAVE Framework

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Formative Research Findings

- Priority Group (WHO)
 - All needed to be
 - Low-income Americans
 - 60 to 74
 - FNS program participants
 - Basically healthy
 - Test concepts with
 - White, African-American
 - Rural and urban
 - South and northeast
 - Male and female
 - Living alone and with others

Formative Research Findings

- Behavior (WHAT)
 - Primary... to eat at least 5 servings of fruits and vegetables every day (at the time research was conducted 2000 Dietary Guidelines were in effect)
 - Secondary ... to participate in a physical activity on most days of the week

Key Factors/Determinants: Eating FV Every Day

- Psychosocial
 - Eating FV is pleasurable; provides benefits
 - Give up traditional foods; boring
 - Normative beliefs from doctors and friends
- Environmental
 - Lack of transportation, cost, access, digestion and health problems, spoilage, lack of social networks
- Antecedent behaviors
 - Shop, buy, prepare
 - Skills and self-efficacy
 - Try new foods
 - Make a public commitment



Key Factors/Determinants:

Participate in Physical Activity

- Psychosocial
 - Make me feel better; has benefits even at my age; is fun; brings social benefits
 - Will result in injury; discomfort, embarrassment
 - Friends and family support; doctors recommend
- Environmental
 - Lack of time, demands of friends and family, cost, lack of skills, chronic health problems, lack of social networks
- Antecedent behaviors
 - Try program
 - Make a public commitment
 - Participate in intervention

Formative Research Findings

Activities (HOW)

- Didactic sessions and materials
 - On benefits
 - Important at any age
 - Information on ways to exercise safely

Key Recommendation: Do **MORE** than just
didactic health education!!!!!!!!!!

Formative Research Findings

Activities (HOW)

- Individualized goal setting with professional involvement
 - Self-assessment tool
 - Exercise prescription
- Motivational content tailored to the audience and theory-based
 - Tailored program based on readiness
 - Individual counseling about benefits and ways to overcome barriers



Formative Research Findings

Activities (HOW)

- Feedback and monitoring activities
 - Record of food consumption
 - Color coding to record progress
 - Vital sign measurement
 - Submit minutes walked
- Rewards
 - Coupons at sessions
 - Educational incentives for attaining goals



Formative Research Findings

Activities (HOW)

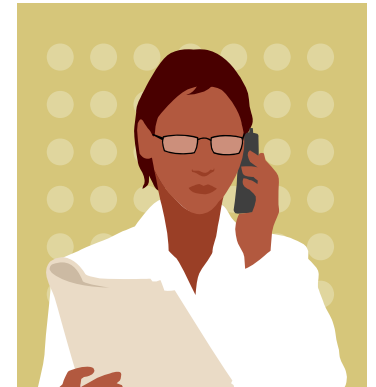
- Empowerment and self-efficacy building activities
 - Recipes and demonstrations
 - Sessions to learn exercise
- Active participation
 - Games and contests
 - Food diaries
 - Role-playing
 - Tasting



Formative Research Findings

Activities (HOW)

- Social support from professionals
 - Reminders (phone calls and magnets)
 - Telephone supervision
 - Home visits
- Social support from peers
 - Quarterly group meetings
 - Group exercise sessions
 - Meetings planned by participants



Formative Research Findings

Activities (HOW)

- Changes in the environment for long-term change
 - Meal and congregate eating programs
 - Delivery of produce (free or low-cost)
 - Walking trails
- Addressing barriers
 - Food basket at session
 - Supermarket tour
 - Accident prevention session



Conclusions

- BEHAVE framework helps guide decisions and organize findings.
- Formative research yielded findings on behavior, priority group, key factors and activities.
- BEHAVE framework and formative research findings served as a basis for *Eat Smart, Live Strong*.